

# **Observations on Water Management Act Permitting**

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# Topics

- ◆ **From The Abstract To The Concrete**
  - ◆ **Examples From Application Of The Science**
- ◆ **Observations**
  - ◆ **What Can We Learn From These Examples**

# Fundamental Issue

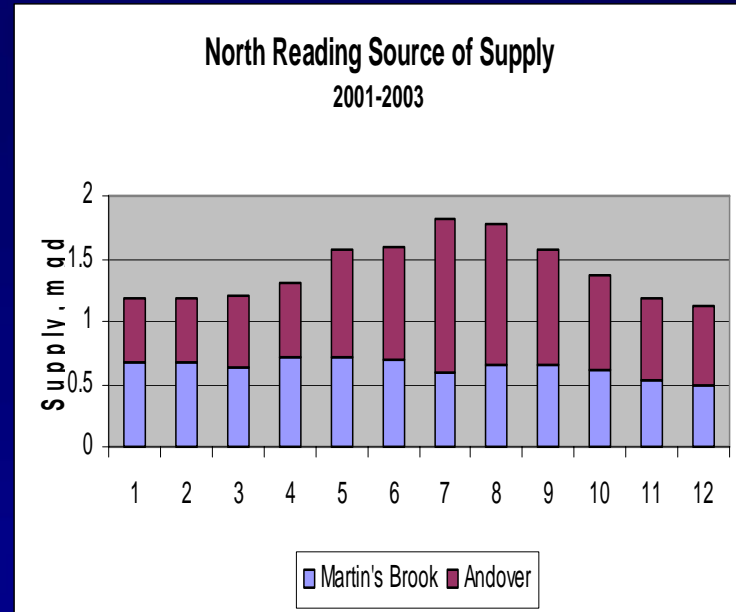
- ◆ In The Abstract, The Argument That Less Water Use Means More Streamflow, Means Better Habitat Is Somewhat Compelling
- ◆ In Reality, World Is A More Complicated Place; Rote Application Of Any Policy Results In Unintended Effects
- ◆ By Looking At Examples, We Can Learn How To Do Things Better

# North Reading Background

- ◆ Ipswich Basin Community
- ◆ Dual Supplies
  - ◆ Registered/Permitted Volumes On Martin's Brook – Tributary Of Ipswich
  - ◆ Interbasin Transfer From Andover – Merrimack Basin Source Water
- ◆ Essentially Unsewered
- ◆ According To DEP, A Low Impact Community On The Basin

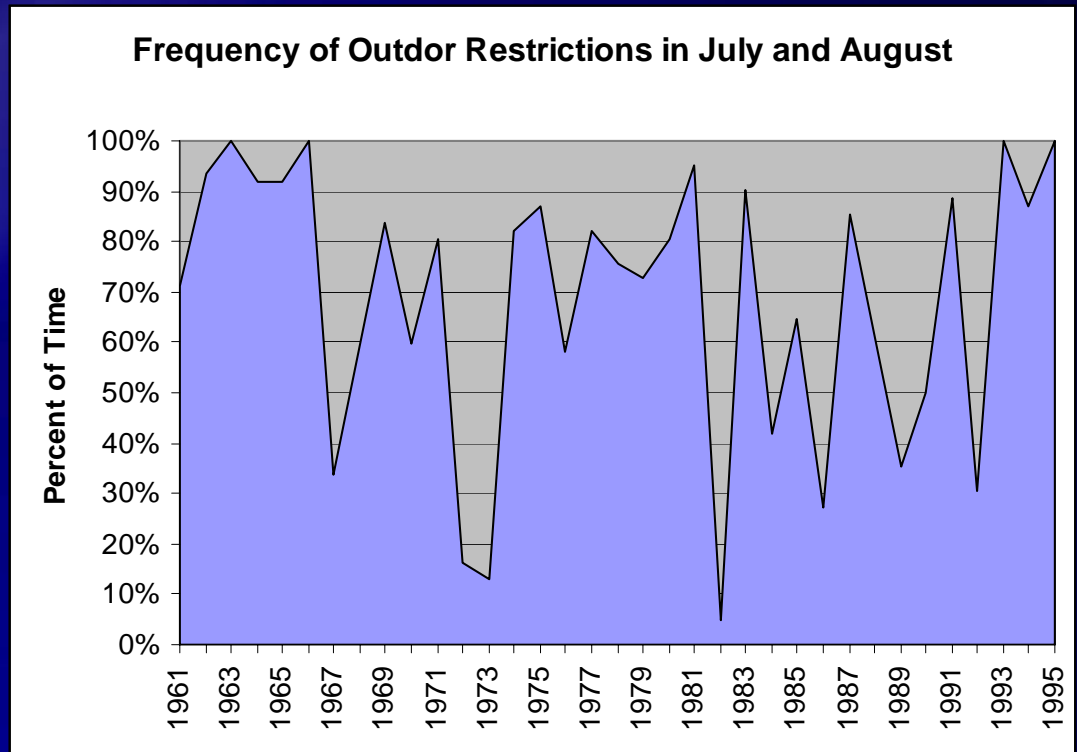
# Sources of Supply

- ◆ Ipswich – Registered 0.96 Mgd, Permitted Additional 0.24
- ◆ Andover – By 1991 Contract Up To 1.5 Mgd
- ◆ Peak Summer Demands Met From Andover



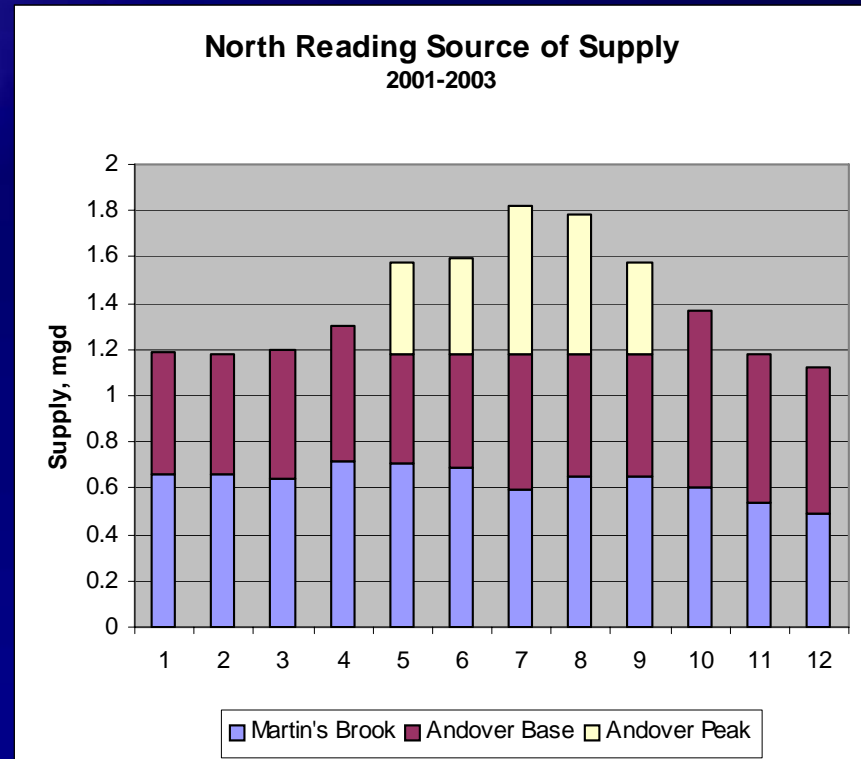
# Outdoor Use Restrictions

- ◆ Limits Outside Use To Hand Held Only When Ipswich Flow Below Certain Levels
- ◆ Would Be In Effect Majority Of The Time



# Impact of Restrictions

- ◆ Constrains Purchases From Andover
- ◆ Estimated \$250,000 Cost To North Reading
- ◆ No Impact On Flow In The Ipswich



# Summer Winter Ratio Policy

- ◆ **Ipswich Performance Standards - 2003**
  - ◆ Ratio  $> 1.4$  = 50 % Reduction
  - ◆ Ratio  $< 1.4$  = 25 % Reduction
- ◆ **Initial WMA Policy - 2004**
  - ◆ Ratio  $> 1.4$ , = 50 % Reduction
  - ◆ Ratio 1.2 To 1.4 = 25 % Reduction
  - ◆ Ratio  $< 1.2$ , = Keep Below 1.2
- ◆ **Revised WMA Policy - 2005**
  - ◆ No Such Restriction Exists

# Ipswich Roll Out

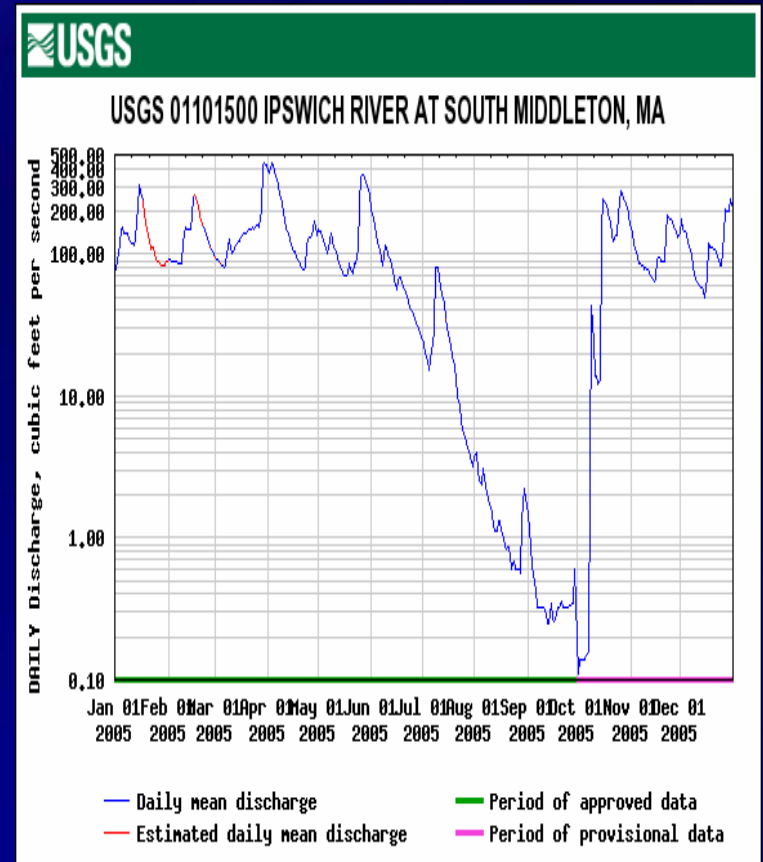
- ◆ **Communities With Very High Ratio Allowed High Usage**
  - ◆ **If At 1.60 Summer/Winter - Need To Drop To 1.3**
- ◆ **Some Communities Severely Penalized**
  - ◆ **North Reading Went From A 1.04 Ipswich Ratio To A 0.8 Ratio**
  - ◆ **Reduced Amount To 55 % Of Registered Volume**

# **Lynn Water & Sewer Commission**

- ◆ **Like North Reading, An Ipswich Community With Dual Supplies, The Ipswich And Saugus Rivers**
- ◆ **Unlike North Reading, Has An Extensive System Of Reservoirs**
- ◆ **Total Useable Storage Approximately 4 Billion Gallons**

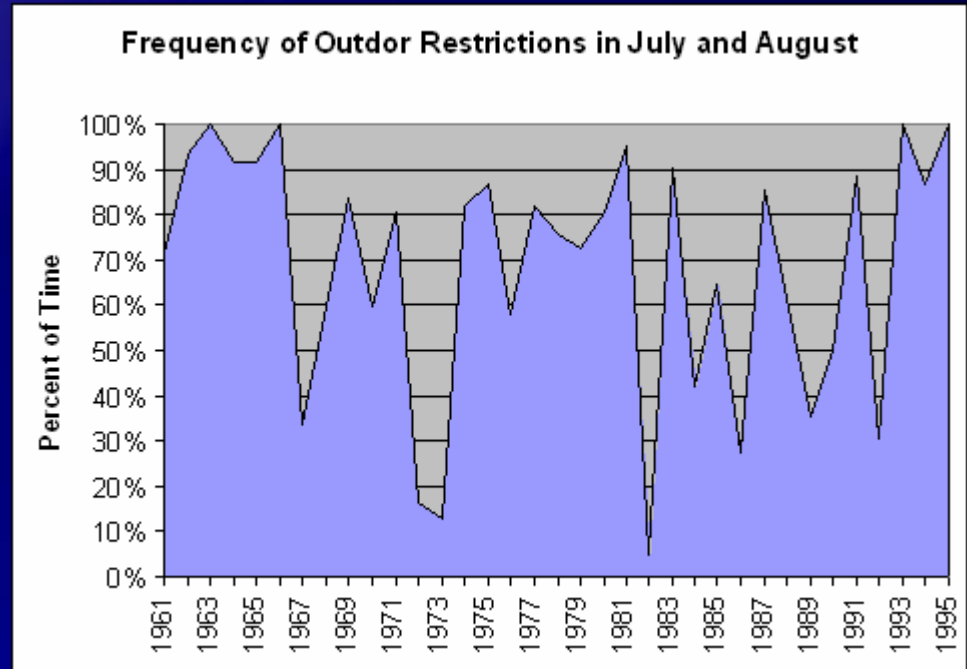
# Permit Restrictions

- ◆ By law prevented from taking water from the Ipswich June through November
- ◆ At all other times, needed to provide minimum in-stream flow of 15 cfs.
- ◆ New permit allows year round diversions; but minimum upped to 44.5 cfs in Fall, spring, winter and 141 cfs in summer.
- ◆ In 2005 river experienced low flows, but LWSC never took water after January 1



# Outdoor Use Restrictions

- ◆ Same As North Reading
- ◆ Outdoor Use Banned 68 % Of Time, July/August
- ◆ Commission Prevented From Effective Use Of Its Reservoir Systems
- ◆ Should LWSC Have Outdoor Use Restrictions ?
  - ◆ Absolutely - Tied To Reservoir Level And Time Of Year, Not River Flow



# **OBSERVATIONS**

- ◆ **Rote Application Of The Policy Leads To Impractical Impacts**
- ◆ **Broad Brush Evaluations Serve Little Purpose**
- ◆ **Each Community Must Be Assessed On Its Own Merits**
- ◆ **The Process For Issuing Permits Needs Substantial Modification**